RADIO SERVICE BULLETIN

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ABBREVIATIONS.

The necessary corrections to the List of Radio Stations of the United States and to the International List of Radiotelegraph Stations, appearing in this bulletin under the heading "Alterations and corrections," are published after the stations affected in the following order:

Name =Name of station.
G. loc. =Geographical location: O=west longitude, N=north latitude, S=south latitude.
Call =Call letters assigned.
System =Radio system used and sparks per second.
Range =Normal range in nautical miles.
W. L. =Wave lengths assigned: Normal wave lengths in italics.
Service =Nature of service maintained:
PG=General public.
PR=Limited public.
P =Private.
O =Government business exclusively.
Hours =Hours of operation:
N =Continuous service.
X =No regular hours.
m =a. m. (12m=midday).
s =p. m. (12s=midnight).
Rates =Ship or coast charges in cents: c=cents. (The rates in the international list are given in francs and centimes.)
I. W. T. Co. =Independent Wireless Telegraph Co.
R. C. of A. =Radio Corporation of America.
S. O. R. S. =Ships Owners Radio Service.
Co. =Company.
Corp. =Corporation.
& =And.

56590—21

NEW STATIONS.

Commercial land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Station.	Call signal.	Wave lengths.	Service.	Hours.	Station controlled by—
Hillsboro, Oreg [1]	KGH	300, *600*, 8,300, 9,400, 14,200, 15,300.	PR	X	Federal Telegraph Co.
Palo Alto, Calif. [2]	KWT	300, *600*, 8,300, 9,400, 14,200, 15,300.	PR	X	Do.
San Francisco, Calif.	KHH	300, 570, *600*	PR	X	John P. Hickey.

[1] Loc. (approximately) 0.122° 59′ 00″, N. 45° 31′ 00″; rates, from San Francisco to Portland, Oreg., 15 words rush, 60 c.; day letter, 50 words, 90 c.; night letter, 50 words, 60 c.; from San Francisco to Los Angeles and San Diego, 15 words rush, 48 c.; day letter, 50 words, 72 c.; night letter, 50 words, 48 c.; from San Francisco to Seattle and Tacoma, 15 words rush, 72 c.; day letter, 50 words, $1.08; night letter, 50 words, 72 c.
[2] Loc. (approximately) 0.122° 07′ 30″, N. 37° 28′ 00″; rates, from San Francisco to Portland, Oreg., 15 words rush, 60 c.; day letter, 50 words, 90 c.; night letter, 50 words, 60 c.; from San Francisco to Los Angeles and San Diego, 15 words rush, 48 c.; day letter, 50 words, 72 c.; night letter, 50 words, 48 c.; from San Francisco to Seattle and Tacoma, 15 words rush, 72 c.; day letter, 50 words, $1.08; night letter, 50 words, 72 c.

Commercial ship stations, alphabetically by names of vessels.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Name of vessel.	Call signal.	Rates.		Service.	Hours.	Owner of vessel.	Station controlled by—
		North and South American service.	Transoceanic service.				
		Cents.	*Cents.*				
Agwibay	KDSR			PG	N	Atlantic, Gulf & West Indies S. S. Lines.	
Atlanta City	KDSW			PG	X	U. S. Steel Products Co.	
Betty R.	KDTF			PR	X	Edward G. Crossett	
Blue Hen State	KDTC	4	4	PG	N	U. S. Shipping Board.	
Bohemian Club	KDTB	4	4	PG	X	do	
David McKelvy	KDTD			PG	X	Tidewater Oil Co.	
Dixiana	KDSP	4	4	PG	X	American Sugar Transit Corp.	R. C. of A.
Empire State	KDSV	4	4	PG	N	U. S. Shipping Board.	S. O. R. S.
Hammac	KDTJ						
Huron [1]	WCH			PG	X	Wyandotte Transportation Co.	R. C. of A.
Illinois	KDSZ			PG	X	Texas Co.	
Liberator	KDTA					Lybeck Ocean Harvester Co.	
Lio	KDSO	4	4	PG	X	U. S. Shipping Board.	
Nourmahal	KDTI					Vincent Astor	
Playa	KDTE						
Puente	KDSS			PG	X	Union Oil Co.	
Sea Ranger	KDSQ			PG	X	Ship Owners & Merchants Tugboat Co.	Owner of vessel.
Sea Scout	KDSY			PG	X	do	Do.
Tecomate	KDST			PG	X	Kyle & Purdy	
"323"	KDTH					John B. Paine	
Toteco	KDSU			PG	X	Kyle & Purdy	
West Faralon	KDSX	4	4	PG	X	U. S. Shipping Board.	
Yankee Arrow	KDTG			PG	X	Standard Transportation Co.	

[1] Range, 150; system, R. C. of A., 1,000; w. l., 300, 600; rates, Great Lakes service, 2 c. per word.

Commercial land and ship stations, alphabetically by call signals.

[b—ship station; c—land station.]

Call signal.	Name.		Call signal.	Name.	
KDSO	Lio	b	KDTC	Blue Hen State	b
KDSP	Dixiano	b	KDTD	David McKelvy	b
KDSQ	Sea Ranger	b	KDTE	Playa	b
KDSR	Agwibay	b	KDTF	Betty R	b
KDSS	Puente	b	KDTG	Yankee Arrow	b
KDST	Tecomate	b	KDTH	"323"	b
KDSU	Toteco	b	KDTI	Nourmahal	b
KDSV	Empire State	b	KDTJ	Hammac	b
KDSW	Atlanta City	b	KGH	Hillsboro, Oreg	c
KDSX	West Faralon	b	KHH	San Francisco, Calif	c
KDSY	Sea Scout	b	KWT	Palo Alto, Calif	c
KDSZ	Illinois	b	WCH	Huron	b
KDTA	Liberator	b	WRH	Harvard	b
KDTB	Bohemian Club	b			

Government land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations published by the Berne bureau.]

Station.	Call signal.	Station controlled by—
Manati, Cuba	NMB	U. S. Navy.
Quantico, Va	NFV	Do.

Government ship stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920.]

Name of ship.	Call signal.	Name of ship.	Call signal.
Corry	NUQZ	Mahanna	NURB
Eagle 24	NEKJ		

Government land and ship stations, alphabetically by call signals.

[b—ship station; c—land station.]

Call signal.	Name of station.		Call signal.	Name of station.	
NEKJ	Eagle 24	b	NUQZ	Corry	b
NFV	Quantico, Va	c	NURB	Mahanna	b
NMB	Manati, Cuba	c			

Special land stations, alphabetically by names of stations.

[Additions to the List of Radio Stations of the United States, edition of June 30, 1920, only.]

Station.	Call signal.	Station controlled by—
Cambridge, Mass.	1XAB	Clapp-Eastham Co.
Lexington, Va.	3ZX	Harry M. Quisenberry.
Napa, Calif.	6ZAD	J. J. Mahler, jr.
Oakland, Calif.	6ZAE	Chris F. Elferle.
Olympia, Wash.	7ZP	Edwin W. Wilson.
Philadelphia, Pa.	3XV	Thomas Appleby.
Pittsburgh, Pa.	8XM	Phillips Thomas.
San Antonio, Tex.	5XP	E. M. Baker.
Do.	5ZAI	R. C. Walker.
Do.	5ZR	John C. Rodriguez.
Spokane, Wash.	7YL	North Central High School.
Sunnyvale, Calif.	6XAG	The Radio Shop.
Worcester, Mass.	1YK	Worcester Polytechnic Institute.

Special land stations grouped by districts.

Call signal.	District and station.	Call signal.	District and station.
	First district:		Sixth district:
1XAB	Cambridge, Mass.	6XAG	Sunnyvale, Calif.
1YK	Worcester, Mass.	6ZAD	Napa, Calif.
	Third district:	6ZAE	Oakland, Calif.
3XV	Philadelphia, Pa.		Seventh district:
3ZX	Lexington, Va.	7YL	Spokane, Wash.
	Fifth district:	7ZP	Olympia, Wash.
5XP	San Antonio, Tex.	8XM	Pittsburgh, Pa.
5ZAI	Do.		
5ZR	Do.		

ALTERATIONS AND CORRECTIONS.

COMMERCIAL LAND STATIONS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations, published by the Berne bureau.]

EAST HAMPTON, N. Y.—Range, 500; system, Cutting & Washington, 1000; w. l., 300 *600*, 1800.

FALL RIVER MILLS, CALIF.—Range, 100; system, composite; rates, none.

LOST HARBOR, ALASKA.—Range, 200

NEWARK, N. J.—W. l., 300, *600*, 3100.

NEWPORT, R. I.—Range, 300; system, Marconi, 1,000; w. l., 300, 450, *600;* hours, 8 p. m.–5 a. m.

SUSANVILLE, CALIF.—Range, 100; system, composite, 240; rates, none.

COMMERCIAL SHIP STATIONS, ALPHABETICALLY BY NAMES OF VESSELS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1920, and to the International List of Radiotelegraph Stations, published by the Berne bureau.]

ADMIRAL SEBREE.—Range, 150; hours, X

AJAX.—South Pacific Seas Co. owner of vessel.

ARDEN.—Station operated and controlled by S. O. R. S.

AUDITOR.—Range, 300; system, Navy-Marconi, 1,000.

BAYOU CHICO.—Station operated and controlled by I. W. T. Co.

BRISTOL.—Range, 300; system, Navy-R. C. of A., 1,000; w. l., 300, 450, *600*.

BYLAYL.—W. l., 300, 450, *600*.

CALLABASAS.—System, Navy, 1,000; w. l., 300, 450, *600*.

CAMDEN (KDKL).—Range, 300; system, Wireless Specialty Apparatus Co., 1,000; w. l., 300, *600;* hours, X.

CHICAGO.—Range, 200.

CITY OF SEATTLE.—Range, 150; system, Marconi, 1000.

CITY OF SHERMAN.—U. S. S. B. owner of vessel.

COMUS.—Range, 300; w. l., 300, *600.*

COOT.—Station operated and controlled by owner of vessel.

CORONADO.—System, Navy-Kilbourne & Clark, 1000; w. l., 300, 450, *600.*

CUBORE.—Range, 300; system, Marconi, 1000; w. l., 300, 450, *600.*

DARTFORD.—Station operated and controlled by S. O. R. S.

DELPHINE.—Service, PG; hours, X.

DIRECTOR.—Northern Transportation Co. owner of vessel; station operated and controlled by owner of vessel.

ELDORADO.—Range, 300; system, Marconi, 480; w. l., 300, 450, *600.*

ESSEX.—Range, 150.

E. T. BEDFORD.—Station operated and controlled by R. C. of A.

FLORENCE OLSON.—Station operated and controlled by owner of vessel.

FRANKLIN COUNTY.—System, Navy-Wireless Specialty Apparatus Co., 1000; w. l., 300, *600.*

GEO. H. JONES.—System, R. C. of A., 1000.

GLENDOLA.—System, Navy-Kilbourne & Clark, 1000; w. l., 300, 450, *600.*

GLORIA WEST.—Range, 150; system, Navy-Simon, 1000; w. l., 300, 450, *600;* service, PG; hours, X; station operated and controlled by owner of vessel.

GLYNDON.—W. l., 300, 450, *600.*

HASTINGS.—Station operated and controlled by I. W. T. Co.

HENRY COUNTY.—System, Navy-Wireless Improvement Co., 1000; w. l., 300, *600.*

I. J. MERRITT.—Range, 200; system, Navy-Marconi, 1,000; rates, North and South American service 4 c. per word; station operated and controlled by owner of vessel.

INDIA ARROW.—Range, 300; system, Marconi, 1000; hours, X; rates, North and South American and transoceanic services 8 c. per word; station operated and controlled by R. C. of A.

JAVA ARROW.—Range, 300; system, R. C. of A., 1000; hours, X; station operated and controlled by R. C. of A.

J. FLETCHER FARRELL.—Sinclair Navigation Co. owner of vessel.

J. M. DANZIGER.—Range, 300.

KETCHIKAN.—Rates, transoceanic service 8 c. per word.

KEYSTONE STATE.—Station operated and controlled by S. O. R. S.

KVICHAK.—System, Marconi, 1 000; service, PR and PG; hours, N and X; rates, North and South American service 8 c. per word.

LABORER.—Northern Transportation Co. owner of vessel.

LAKE DUNMORE.—Station operated and controlled by R. C. of A.

LAKE FANDANGO.—Range, 200; system, Navy-Marconi, 1,000.

LAKE FITCH.—System, Navy-Marconi, 1000; w. l., 300, *600.*

LAKE FURNAS.—Range, 200; system, Navy-Marconi, 1,000.

LAKE GEDNEY.—System, Navy-Marconi, 1,000.

LEVISA.—Range, 200.

MANUKAI.—Range, 150; system, R. C. of A., 1,000; rates, North and South American and transoceanic services 8 c. per word; station operated and controlled by R. C. of A.

MARGARET (KUQS).—Station operated and controlled by owner of vessel.

METAPAN.—Range, 300.

NEW ROCHELLE.—Name changed to Hudson.

NORTH WIND.—Frank W. Frueauff owner of vessel.

NUSHAGAK.—System, Marconi, 1,000; service, PG and PR; hours, N and X; rates, North and South American service 8 c. per word.

OHONKARA.—Station operated and controlled by owner of vessel.
OLDHAM.—Station operated and controlled by I. W. T. Co.
REDWOOD.—Range, 300; hours, N and X; rates, transoceanic 8 c. per word.
SANTA ANA (WAL).—Hours, N and X.
SANTA LUISA.—Range, 300.
SEAFARER.—R. Bean owner of vessel.
SEEANDBEE.—System, R. C. of A., 1,000.
SELMA CITY.—Range, 300; system, Marconi, 1,000; w. l., 300, 450, *600*; hours, X; rates, North and South American and transoceanic services 8 c. per word.
SIALIA.—System, Cutting & Washington, 1,000, also Deforest radiophone; w. l., 300, 450, *600*-phone 400; rates; North and South American, transoceanic and Great Lakes services, 4 c. per word; station operated and controlled by owner of vessel.
STAR OF GREENLAND.—Station operated and controlled by owner of vessel.
STAR OF LAPLAND.—Station operated and controlled by owner of vessel.
SUNSHINE.—Range, 300; system, Navy-Marconi, 1,000; w. l., 300, 450, *600*.
SURINAME.—Range, 200; system, Wireless Specialty Apparatus Co., 1,000; w. l., 300, 450, *600*.
SWIFTLIGHT.—Range, 300; system, R. C. of A., 1,000; w. l., 300, 450, *600*; rates, North and South American and transoceanic services 8 c. per word; station operated and controlled by R. C. of A.
TAMPICO.—Station operated and controlled by owner of vessel.
TATOOSH.—Henry C. Peterson owner of vessel.
THOROBRED.—Service, PG; hours, X; Dutee W. Flint owner of vessel.
TULSAGAS.—Station operated and controlled by S. O. R. S.
VESTA.—Range, 300.
VIGILANT.—Station operated and controlled by owner of vessel.
WESTLAND.—System, Navy-Marconi, 1,000.
WESTWOOD.—W. l., 300, 450, *600*; hours, N.
WHITEMARSH.—E. W. Marland owner of vessel.
WILLIAM M. MILLS.—Station operated and controlled by owner of vessel.
WILLIAM N. PAGE.—System, Navy-Lowenstein, 1,000; w. l., 300, 450, *600*.
WISLA.—Range, 275; system, English Marconi, 560; w. l., 300, 450, *600*.
W. L. STEED.—W. l., 300, 450, *600*.
WYANDOTTE (WCO).—Range, 150; system, R. C. of A., 1000.

Strike out all particulars of the following-named vessels:

Abbeville.
Aberdeen.
Acremia.
Aculeo.
Afrania.
Agria.
Ahala.
Aiken.
Aimwell.
Alapaha.
Albatross.
Alcis.
Alderman.
Allison.
Alpaco.
Alta.
Amoron.
Andra.
Angelina.
Anthera.
Arado.
Arambi.
Ardena.
Asotin.
Aspenhill.
Astoria.
Awensdaw.
Baganito.
Bagoso.
Baladan.
Balcsaro.
Balsto.
Banago.
Battahatchee.
Battonville.
Baxley.
Bayou Teche.
Bedminster.
Belding.
Beloit.
Benzonia.
Berea.
Blakeley.
Blandon.
Blue Eagle.
Blythedale.
Bobring.
Bockonoff.
Bologan.
Bon Secour.
Boone.
Borad.
Botsford.
Boulton.
Boykin.
Boynton.
Braeburn.
Brant.
Braxton.
Bromela.
Brompton.
Broncho.
Brookwood.
Buhisan.
Bulana.
Bushrod.
Cabeza.
Calala.
Campello.
Caponka.
Caribou.
Cartona.
Casmalia.
Catawba.
Cheron.
Chibiabos.
Clodia.
Conewago.
Coot.
Corone.
Corvallis.
Coweta.
Cresap.
Cruso
Cumberland.
Curlew.
Daca.
Dalgada.
Danvers.
Datis.
Dertona.
Diana.

Dungeness.
Esopus.
Eyota.
Falmouth.
Fassett.
Fernandina.
Fish Hawk.
Flavel.
Folsom.
Fonduco.
Forster.
Fort Leavenworth.
Fort Russell.
Fort Sill.
Fort Smith.
Fort Wright.
Governor.
Gray Eagle.
Grayling.
Grebe.
Harish.
Haverhill.
Heron.
Himoto.
Hokah.
Horado.
Issaquena.
Itanca.
Jamaica.
Kanakee.
Kasota.
Katia.
Kenosha.
Kimta.
Kingfisher (KOQR).
Klamath.
La Forge.
Lone Star.
Lonoke.
Loon.
Mahnet.
Makanda.
Maratanza.
Marshfield.
Mattapan.
Medford.
Medric.
Mono.
Moraine.
Moritz.
Musketo.
Nashotah.
Neeolah.
Newton (KIRC).
Northbend.
Obak.
Oglethorpe.
Okiya.
Oraton.
Osprey.
Owatama.
Panga.
Pascagoula.
Penguin.
Plover.
Quemakoning.
Quidnic.
Quinault (KNEI).
Quinneseco.
Redlands.
Sapona.
Saris.
Sea Bird.
Sheldrake.
Snipe.
Sturgeon Bay.
Swampscott.
Tanks.
Teal.
Tern.
Toka.
Tuwetanka.
Tyee (KENB).
Wakan.
Wakanna.
Wakiki.
Waneyanda.
Wasco.
Wayhut.
Wenakee.
Widgeon.
Wild Goose.
Wonahbe.
Woyaca.
Zenith.

COMMERCIAL LAND AND SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

KDCI, *read* Hudson. Strike out all particulars following the call signals, KDJA, KEBK, KEBL, KECC, KECT, KECZ, KEDB, KEDC, KEDD, KEFF, KELD, KELJ, KELV, KEMC, KEMR, KENB, KENL, KEPB, KEPX, KEQQ, KESF, KETD, KETF, KETK, KETR, KETT, KEVL, KEZT, KFM, KGB, KIBS, KIBT, KIBX, KICB, KICF, KICG, KICJ, KICT, KICX, KIDK, KIFF, KIFS, KIFT, KIGV, KIKV, KILB, KILC, KILD, KIRC, KISB, KJOI, KKIA, KKEA, KKIE, KKII, KKIO, KKOU, KLAI, KLN, KMUO, KNEI, KNII, KNIO, KNOE, KNUA, KOLG, KOMJ, KOQR, KOSB, KOSK, KOSP, KOSZ, KOTC, KOTS, KPAE, KPAO, KPAU, KPEI, KPEU, KPIA, KPIU, KPOA, KPOI, KPUA, KPUE, KPUO, KQAO, KRAI, KRAO, KRAU, KRIE, KROA, KRUA, KRUE, KSEO, KTEO, KUDB, KUDF, KUFL, KUFM, KUFQ, KUFS, KUFT, KUFX, KUGF, KUGJ, KUJM, KUJN, KUMJ, KURQ, KVEE, KVEU, KZE, KZUA, KZUO, WBII, WBIO, WBIU, WBOA, WBOU, WCOA, WCAA, WCAO, WCEI, WCEO, WDAE, WDAI, WDEE, WDUE, WGAU, WGIO, WGR, WGUE, WGUU, WJAE, WJEU, WJUU, WKIA, WKOE, WKOI, WLB, WLIU, WLOA, WLUE, WMOI, WMOO, WMOU, WMUU, WNEU, WNIA, WNOU, WNUA, WNUE, WNUI, WPAA, WPB, WPOE, WPOI, WQAI, WQIE, WQIU, WQOO, WQUI, WRIU, WRUE, WRUI, WRUU, WSAU, WSIA, WSIE, WSII, WTAU, WTIA, WTOA, WTOE, WVEO, WVII, WVUI, WVUO, WVUU, WXIE, WXII, WXIU, WXUU, WZAI, WZAO, WZUU.

GOVERNMENT LAND STATIONS, ALPHABETICALLY BY NAMES OF STATIONS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1920.]

Sea Gate, N. Y. (NAH).—Strike out all particulars.

GOVERNMENT SHIP STATIONS, ALPHABETICALLY BY NAMES OF VESSELS.

[Alterations and corrections to be made to the List of Radio Stations of the United States, edition of June 30, 1920.]

Strike out all particulars of the following-named vessels:

Astoria.
Canonicus.
Castine.
Eagle 25.
G-1.
Samoa.
S. P. 609 (Nokomis).
S. C. 17.
S. C. 19.
S. C. 21.
S. C. 24.
S. C. 25.
S. C. 26.
S. C. 35.
S. C. 37.
S. C. 40.
S. C. 42.
S. C. 43.
S. C. 44.
S. C. 45.
S. C. 46.
S. C. 47.
S. C. 48.
S. C. 49.
S. C. 50.
S. C. 51.
S. C. 52.
S. C. 53
S. C. 54.
S. C. 55.
S. C. 56.
S. C. 68.
S. C. 70.
S. C. 72.
S. C. 73.
S. C. 74.
S. C. 77.
S. C. 95.
S. C. 96.
S. C. 105.
S. C. 109.
S. C. 110.
S. C. 111.
S. C. 116.
S. C. 117.
S. C. 118.
S. C. 120.
S. C. 123.
S. C. 126.
S. C. 128.
S. C. 129.
S. C. 133.
S. C. 134.
S. C. 135.
S. C. 136.
S. C. 138.
S. C. 144.
S. C. 148.
S. C. 164.
S. C. 165.
S. C. 166.
S. C. 167.
S. C. 168.
S. C. 178.
S. C. 180.
S. C. 181.
S. C. 182.
S. C. 184.
S. C. 187.
S. C. 193.
S. C. 194.
S. C. 196.
S. C. 206.
S. C. 208.
S. C. 211.
S. C. 212.
S. C. 213.
S. C. 215.
S. C. 216.
S. C. 217.
S. C. 218.
S. C. 220.
S. C. 221.
S. C. 226.
S. C. 228.
S. C. 230.
S. C. 235.
S. C. 236.
S. C. 238.
S. C. 239.
S. C. 245.
S. C. 246.
S. C. 248.
S. C. 250.
S. C. 254.
S. C. 255.
S. C. 257.
S. C. 258.
S. C. 259.
S. C. 262.
S. C. 265.
S. C. 266.
S. C. 268.
S. C. 269.
S. C. 272.
S. C. 282.
S. C. 288.
S. C. 291.
S. C. 296.
S. C. 304.
S. C. 307.
S. C. 309.
S. C. 322.
S. C. 329.
S. C. 331.
S. C. 336.
S. C. 338.
S. C. 339.
S. C. 351.
S. C. 352.
S. C. 354.
S. C. 356.
S. C. 421.
S. C. 422.
S. C. 423.
S. C. 428.
S. C. 429.
S. C. 430.
Supply.
Yankton.
Yorktown.

GOVERNMENT LAND AND SHIP STATIONS, ALPHABETICALLY BY CALL SIGNALS.

Strike out all particulars following the call signals, NABR, NAH, NAMM, NCS, NDA, NEKK, NGM, NIQF, NIQG, NIQJ, NOBJ, NOBL, NOBN, NOBR, NOBS, NOBT, NOBZ, NOCC, NOCG, NOCK, NOCL, NOCM, NOCN, NOCP, NOCQ, NOCR, NOCS, NOCT, NOCV, NOCX, NOCZ, NODB, NODC, NODD, NODQ, NODS, NODV, NODX, NODZ, NOFB, NOGB, NOGC, NOGP, NOGT, NOGV, NOGX, NOJF, NOJG, NOJJ, NOJL, NOJP, NOJS, NOJV, NOJX, NOKD, NOKF, NOKG, NOKJ, NOKL, NOKP, NOKS, NOLL, NOLM, NOLN, NOLP, NOLQ, NOLS, NOLV, NOLX, NOLZ, NOMC, NOMG, NOMP, NOMQ, NOMS, NONJ, NONL, NONP, NONQ, NONR, NONT, NONV, NONX, NONZ, NOPB, NOPC, NOPK, NOPM, NOPP, NOPV, NOPX, NOQB, NOQC, NOQK, NOQL, NOQN, NOQP, NOQT, NOQV, NOQZ, NORB, NORC, NORG, NORL, NORM, NORP, NORQ, NORT, NOSK, NOSR, NOSV, NOTD, NOTP, NOTS, NOTV, NOVF, NOVP, NOVR, NOVZ, NOXC, NOXD, NOXQ, NOXR, NOXT, NOXX, NOZT, NOZV, NOZX, NQX, NSK, NTK, NXY.

SPECIAL LAND STATIONS, BY NAMES OF STATIONS.

LAWRENCE, KANS. (9YN).—Strike out all particulars.
NEW YORK, N. Y. (2XK).—Superadio Corporation, owner of station.
NORFOLK, VA. (3YD).—Strike out all particulars.
SANTA BARBARA, CALIF. (6ZY).—Strike out all particulars.

MISCELLANEOUS.

OPERATORS' LICENSES SUSPENDED.

First-grade license No. 19920, issued at Baltimore, January 6, 1920, has been suspended for a period of three months on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

First-grade license No. 24055, issued at San Francisco, May 26, 1920, has been suspended for a period of one month on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

First-grade license No. 18101, issued at Seattle, July 28, 1919, has been suspended for a period of three months on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

First-grade license No. 19675 issued at Boston, October 30, 1919, has been suspended for a period of three months on account of the holder of the license violating article 6 of the International Convention service regulations, in that he transmitted superfluous signals.

DISTRIBUTION OF WEATHER INFORMATION BY NAVAL RADIO STATIONS.

In cooperation with the Office of Communications of the Navy Department the United States Weather Bureau will issue a special bulletin containing surface observations from regular Weather Bureau stations, upper-air observations from aerological stations maintained by the Navy, Army, and Weather Bureau, and a summary of weather conditions, forecasts, and warnings. The bulletin is for the benefit of marine and aviation interests, but is designed especially to meet the needs of the latter. The bulletin will begin June 1, 1921, and will be broadcasted from the naval radio station at Arlington, Va., each morning at 10.30 o'clock (75th meridian time), Sundays and holidays included. This service is in addition to the distribution now being made each night from the naval radio stations at Arlington, Va., Key West, Fla., Point Isabel, Tex., Great Lakes, Ill., and San Juan, P. R., as described in Weather Bureau circular of October 26, 1920.—*From Hydrographic Bulletin, June 1, 1921.*

INTERFERENCE BY EXPERIMENTAL STATIONS.

It has been reported to the Bureau that some stations, presumably experimenting, use their transmitters without giving their call signal, as required in regulations 76 and 77.

UNITED STATES DEPARTMENT OF AGRICULTURE,
WEATHER BUREAU, WASHINGTON.

Forecast Division.

Local distribution of forecasts, storm and hurricane warnings, and weather information by naval radio stations.

[In cooperation with Office of Communications of the Navy Department.]

Beginning June 10, 1921, there will be a systematic broadcasting of wind and weather forecasts, storms and hurricane warnings, and advices relating thereto from naval radio stations on the south Atlantic and Gulf coasts, in the Caribbean Sea, and on the Great Lakes. This distribution will be in the nature of a localized service, and supplemental to the general broadcasting of weather forecasts, warnings, and bulletins from the high-powered naval radio stations at Arlington, Va., Key West, Fla., San Juan, P. R., Point Isabel, Tex., and Great Lakes, Ill., as described in Weather Bureau circulars of October 26, 1920, and May 16, 1921.

The table below shows the naval radio stations from which distribution will be made, their transmitting wave lengths, call letters, the information which will be broadcast

therefrom, the hours of distribution (75th meridian time), and the Weather Bureau stations from which the forecasts and information will be supplied.

Whenever storm or hurricane warnings are issued in the forenoon (based on 8 a. m. observations) they will be broadcast at the same time as the wind and weather forecasts. When issued in the afternoon (based on special observations), they will be broadcast at the evening hours indicated.

Vessel owners and others desiring to receive these reports should make every effort to obtain them on regular schedules, as repetitions, except as indicated, will be made only in unusual circumstances.

Additional copies of the circular may be obtained by application to any Weather Bureau office named in the table or to Chief, U. S. Weather Bureau, Washington, D. C.

Naval radio stations.			Weather information broadcast.	Broadcasting time (75th meridian).	Weather Bureau stations issuing information.
Location.	Transmitting wave.	Call letters.			
Portland, Me.....	1,620	NAB	(a) Wind and weather forecasts and storm warnings for Maine coast, Eastport to Portsmouth; advisory messages regarding storm warnings issued for north Atlantic coast; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Portland.	(a) Noon.....	Portland, Me.
			(b) Storm warnings and advices issued in afternoon.	(b) 8 p. m.	
Boston, Mass.....	2,250	NAD	(a) Wind and weather forecasts and storm warnings for New Hampshire, Massachusetts, and Rhode Island coasts; advisory messages regarding storm warnings issued for north Atlantic coast; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Highland Light, Nantucket, and Block Island.	(a) 11 a. m....	Boston, Mass.
			(b) Storm warnings and advices issued in afternoon.	(b) 5 p. m.	
New York, N. Y..	1,832	NAH	(a) Wind and weather forecasts and storm warnings for New York and Connecticut coasts; forecasts Sandy Hook to Grand Banks for European steamers; advisory messages regarding storm warnings issued for north and middle Atlantic coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Sandy Hook.	(a) 10.30 a. m..	New York, N. Y.
			(b) Storm warnings and advices issued in afternoon.	(b) 5 p. m.	
Philadelphia, Pa.	1,948	NAI	(a) Wind and weather forecasts and storm warnings for New Jersey, Delaware, and Maryland coasts; advisory messages regarding storm warnings issued for north and middle Atlantic coasts; and 8 a. m. wind direction and velocity and state of weather at Delaware Breakwater.	(a) 10.45 a. m.	Philadelphia, Pa.
			(b) Storm warnings and advices issued in afternoon.	(b) 5 p. m.	
Baltimore, Md....	700	NBZ	(a) Wind and weather forecasts and storm warnings for Chesapeake Bay; advisory messages regarding storm warnings issued for middle and south Atlantic coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Baltimore and Norfolk.	(a) 10.30 a. m..	Baltimore, Md.
			(b) Storm warnings and advices issued in afternoon.	(b) 4 p. m.	

Naval radio stations.			Weather information broadcast.	Broadcasting time (75th meridian).	Weather Bureau stations issuing information.
Location.	Transmitting wave.	Call letters.			
Norfolk, Va.....	1,851	NAM	(a) Wind and weather forecasts and storm warnings for Virginia and North Carolina coasts; advisory messages regarding storm warnings issued for Chesapeake Bay and middle and south Atlantic coasts.	(a) 10.45 a. m..	Cape Henry, Va.
			(b) Storm warnings and advices issued in afternoon.	(b) 4 p. m. 8 p. m.	
			(c) Advisory messages regarding hurricanes.	(c) When issued and repeated at 2-hour intervals until midnight.	
			(d) 8 a. m. and 8 p. m. barometric pressure, state of weather, wind direction and velocity, condition of sea, and visibility at Cape Henry and Cape Hatteras.	(d) 8.30 a. m. and 8.30 p. m.	
Charleston, S. C..	2,250	NAO	(a) Wind and weather forecasts and storm warnings for South Carolina coast; advisory messages relating to storm warnings issued for middle, south Atlantic, and east Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Charleston.	(a) 10.30 a. m.	Charleston, S. C.
			(b) Storm warnings and advices issued in afternoon.	(b) 6 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
Savannah, Ga....	1,813	NEV	(a) Wind and weather forecasts and storm and hurricane warnings for Georgia coast; advisory messages relating to storm warnings issued for middle and south Atlantic and east Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Savannah.	(a) 11 a. m.....	Savannah, Ga.
			(b) Storm warnings and advices issued in afternoon.	(b) 6 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
Jacksonville, Fla.	450	NFI	(a) Wind and weather forecasts and storm and hurricane warnings for east Florida coast, Jacksonville to Miami; advisory messages relating to storm warnings issued for middle and south Atlantic and east Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Jacksonville and Titusville.	(a) 11 a. m....	Jacksonville, Fla.
			(b) Storm warnings and advices issued in afternoon.	(b) 6 p. m.	
			(c) Hurricane warnings and advisory messages relating hereto.	(c) When issued and repeated at 2-hour intervals until 7 p. m.	

Naval radio stations.			Weather information broadcast.	Broadcasting time (75th meridian).	Weather Bureau stations issuing information.
Location.	Transmitting wave.	Call letters.			
St. Augustine, Fla.	1,851	NAP	(a) Wind and weather forecasts and storm warnings for east Florida coast, Jacksonville to Miami; advisory messages relating to storm warnings issued for middle and south Atlantic and east Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Jacksonville and Titusville.	(a) 11.30 a. m..	Jacksonville, Fla.
			(b) Storm warnings and advices issued in afternoon.	(b) 7 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
Miami, Fla.....	1,620	NGE	(a) Wind and weather forecasts and storm warnings for east coast of Florida, Miami to Key West; advisory messages relating to storm warnings issued for the middle and south Atlantic and east Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Miami.	(a) 11.30 a. m..	Miami, Fla.
			(b) Storm warnings and advices issued in afternoon.	(b) 6 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
St. Petersburg, Fla.	2,700	NGL	(a) Wind and weather forecasts and storm warnings for west Florida coast, Key West to Apalachicola; advisory messages relating to storm warnings issued for the south Atlantic and Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Tampa and Key West.	(a) 11.30 a. m..	Tampa, Fla.
			(b) Storm warnings and advices issued in afternoon.	(b) 7 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
Pensacola, Fla....	2,250	NAS	(a) Wind and weather forecasts and storm warnings for Florida and Alabama coasts, Apalachicola to Bay St. Louis; advisory messages relating to storm warnings issued for south Atlantic and Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Pensacola.	(a) 11.45 a. m..	Pensacola, Fla.
			(b) Storm warnings and advices issued in afternoon.	(b) 6 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	

Naval radio stations.			Weather information broadcast.	Broadcasting time (75th meridian).	Weather Bureau stations issuing information.
Location.	Transmitting wave.	Call letters.			
New Orleans, La.	1,832	NAT	(a) Wind and weather forecasts and storm warnings for Louisiana and Texas coasts, Bay St. Louis to Port Arthur; advisory messages relating to storm warnings issued for south Atlantic and Gulf coasts; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Burrwood and Port Arthur.	(a) 11 a. m....	New Orleans, La.
			(b) Storm warnings and advices issued in afternoon.	(b) 5 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
Galveston, Tex...	1,813	NKB	(a) Wind and weather forecasts and storm warnings for Texas coast, Port Arthur to Corpus Christi; advisory messages relating to storm warnings issued for the west Gulf coast; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Galveston.	(a) 11.30 a. m..	Galveston, Tex.
			(b) Storm warnings and advices issued in afternoon.	(b) 6 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
Point Isabel, Tex.	2,250	NAY	(a) Wind and weather forecasts and storm warnings for Texas coast, Corpus Christi to Brownsville; advisory messages relating to storm warnings issued for the west Gulf coast.	(a) Noon.....	New Orleans, La.
			(b) Storm warnings and advices issued in afternoon.	(b) 7 p. m.	
			(c) Hurricane warnings and advisory messages relating thereto.	(c) When issued and repeated at 2-hour intervals until midnight.	
Alpena, Mich.....	1,200	NSM	(a) Wind and weather forecasts and storm warnings for Lake Huron; advisory messages relating to storm warnings issued for the Great Lakes.	(a) 11.45 a. m.	Alpena, Mich.
			(b) Storm warnings and advices issued in afternoon.	(b) 4.45 p. m. 7.45 p. m.	
			(c) State of weather, wind direction and velocity, and condition of sea at 8. a. m. at Mackinaw, Middle Island, Alpena, Tawas, Harbor Beach, and Port Huron (barometric pressure Alpena and Port Huron included).	(c) 10.45 a. m.	
Buffalo, N. Y.....	1,200	NNZ	(a) Wind and weather forecasts and storm warnings for Lake Ontario; advisory messages relating to storm warnings issued for the Great Lakes; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Buffalo and Oswego.	(a) 10.45 a. m.	Buffalo, N. Y.
			(b) Storm warnings and advices issued in afternoon.	(b) 5 p. m.	

Naval radio stations.			Weather information broadcast.	Broadcasting time (75th meridian).	Weather Bureau stations issuing information.
Location.	Transmitting wave.	Call letters.			
Cleveland Ohio...	1,080	NRH	(a) Wind and weather forecasts and storm warnings for Lake Erie; advisory messages relating to storm warnings issued for the Great Lakes; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Toledo and Erie.	(a) 11 a. m.....	Cleveland, Ohio.
			(b) Storm warnings and advices issued in afternoon.	(b) 5.30 p. m.	
Chicago, Ill.....	1,200	NUR	(a) Wind and weather forecasts and storm warnings for Lake Michigan; advisory messages relating to storm warnings issued for the Great Lakes; and 8 a. m. wind direction and velocity and state of weather at Beaver Island, Plum Island, and Chicago (barometric pressure Chicago included).	(a) 11 a. m....	Chicago, Ill.
			(b) Storm warnings and advices issued in afternoon.	(b) 5.30 p. m.	
Duluth, Minn....	2,200	NUX	(a) Wind and weather forecasts and storm warnings for Lake Superior; advisory messages relating to storm warnings issued for the Great Lakes; and 8 a. m. barometric pressure, wind direction and velocity, and state of weather at Duluth and Sault Ste. Marie.	(a) 10.45 a. m..	Duluth, Minn.
			(b) Storm warnings and advices issued in afternoon.	(b) 4.45 p. m.	
Guantanamo, Cuba.	2,750	NAW	All hurricane warnings and advisory messages relating thereto whenever issued.	When issued and repeated at about 4-hour intervals.	Washington, D. C.
Port au Prince, Haiti.	2,250	NSC	.....do.....	.....do.....	Do.
San Juan, P. R...	2,750	NAU	.....do.....	.....do.....	San Juan, P. R.
St. Thomas, V. I.	1,688	NBB	.....do.....	.....do.....	Do.
St. Croix, V. I....	450	NNI	.....do.....	.....do.....	Do.

C. F. MARVIN,
Chief of Bureau.

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